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### Abstract

A protection arrangement for a telephone subscriber line interface circuit is disclosed. The arrangement is particularly useful for protecting an electronic telephone set from over-voltage and over-current fault conditions. The arrangement provides a FET that operates in saturation mode to connect an office battery to the subscriber line under normal operation. The FET also provides isolation capabilities for protecting the line circuit from an over-current condition on the subscriber line. Over-voltage protection is provided by way of an isolation relay between the line circuit and the subscriber line. Both the FET and isolation relay are operated by a controller that uses timers in the methods of over-voltage and over-current protection that it performs. A further capability of the arrangement is that it resets itself after the fault condition has ended. This feature is particularly useful in the case of fault conditions of short duration.

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